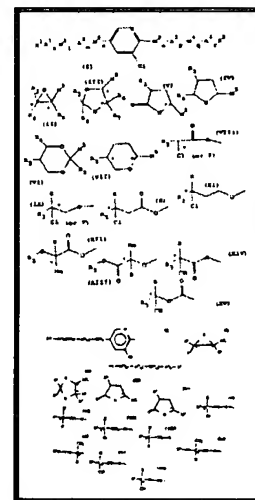


Novel 2,5-di:subst. 3-chloro:pyridine(s) - useful in stable components in ferro-electric or nematic liq. crystal mixts. for surfaces or displays.

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IPC Code: C07D 213/61 ; C07F 5/02 ; C07D 213/62 ; C07D 213/64 ; C07D 213/65 ; C07D 213/79 ;
C07D 213/83 ; C07D 401/06 ; C07D 401/12 ; C07D 403/10 ; C07D 405/06 ; C07D 405/12 ;
C07D 405/14 ; C07D 417/12 ; C07F 7/04 ; C09K 19/34 ; G02F 1/13 ; G09F 9/35 ;

Manual Codes: **E05-E01**(Heterocyclic or aromatic with Si-C bond) , **E07-A02C**(Tetrahydrofuran with =O, no -O- substituents) , **E07-A03B**(Other oxiran) , **E07-A04**(Ring with more than one O) , **E07-D04B**(Pyridine production) , **E07-D10**(Pyr(id)azine, excluding piperazine) , **E07-D12**(Pyrimidine) , **E07-F03**(Others) , **L03-D01D1**(Liquid crystal compounds) , **U11-A03A**(Liquid crystal material, compounds, additives) . **V>7-K10A()**

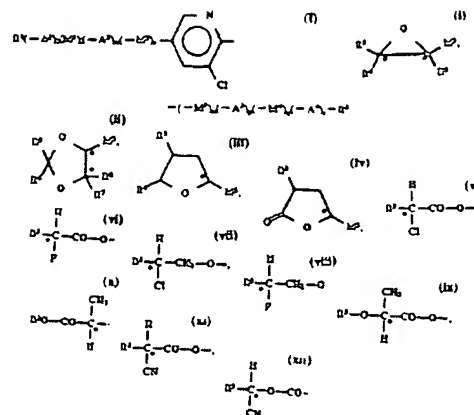


**DERWENT
RECORD**

(DE4315867A) 3-Chloropyridines of formula (I) are new. In (I), R1 and R2 = H, F, Cl, CN, NCS, CF3, OCF3, OCHF2, 1-16C alkyl (opt. with asymmetric C, opt. with 1 or 2 non-adjacent CH2 replaced by -O-, -S-, -CO-, -CO.O-, O.CO-, -CO.S-, -S.CO-, -O.CO.O-, -CH=CH-, -CC-, 1,2-cyclopropylene or -Si(Me)2 - and opt. with 1 or more of the alkyl H substd. by F, Cl, Br or CN), or one of the chiral gps. of formula (II)-(XV); A1-A4 = 1,4-phenylene, pyrazin-2,5-diyl, pyridazin-3,6-diyl, pyridin-2,5-diyl, pyrimidin-2,5-diyl (opt. with 1 or 2 H replaced by F), trans-1,4-cyclohexylene (opt. with 1 or 2 H replaced by CN), (1,3,4)-thiadiazol-2,5-diyl, 1,3-dioxan-2,5-diyl, naphthalen-2,6-diyl, bicyclo (2.2.2) octan-1,4-diyl or 1,3-dioxaborinan-2, 5-diyl; M1-M4 = -O-, -S-, -CO-, -CO.O-, -O.CO-, -CO.S-, -S.CO-, -O.CO.O-, -CH2.O-, -O.CH2-, -CH2.CH2-, -CH=CH= or -CC-; R3, R4, R6 and R7 = H or 1-16C alkyl or R3/R4 together form (CH2)4- or - (CH2)5 when substd. on a dioxolan system; M5 = -CH2.O-, -CO.O-, -O.CH2-, -O.CO- or a single bond; and k+r = 0 or 1, with k+m+p+r above 0 but less than 4. Also claimed are (i) prepn. of (I) by converting 3-Cl-2-hydroxypyridine in a no. of stages to 2,5-di-Br-3-chloropyridine and then replacing both Br with the required gps; and (ii) liq. crystal mixts. contg. (I) and switching or display devices comprising such a mixt. together with a carrier, electrodes, polariser and orientation film.

ADVANTAGE (I) are (photo) chemically stable cpds. with low m.pt. and wide liq. crystal phases, esp. wide nematic, smectic A and smectic C phases, used together with 2-20 (esp. 2-15) components in ferroelectric or nematic liq. crystal mixts.

Images:



Family:	Patent	Pub. Date	DW Update	Pages	Language	IPC Code
	DE4315867A1 *	Nov. 17, 1994	199445	25	German	C07D 213/61
	Local apps.: DE1993004315867 ApplDate:1993-05-12 (93DE-4315867)					
	US5629428 =	May 13, 1997	199725	16	English	C07F 5/02
	Local apps.: US1994000240240 ApplDate:1994-05-10 (94US-0240240)					
	JP6340629A =	Dec. 13, 1994	199509	26	English	C07D 213/61
	Local apps.: JP1994000098767 ApplDate:1994-05-12 (94JP-0098767)					

Priority Number:

Application Number	Application Date	Original Title
DE1993004315867	May 12, 1993	3-CHLORPYRIDINE, VERFAHREN ZU IHRER HERSTELLUNG UND IHRE VERWENDUNG IN FLUESSIGKRISTALLMISCHUNGEN

Chemical Indexing Codes: [Show chemical indexing codes](#)

Markush Compound Numbers: [Show Markush numbers](#)

Ring Index Numbers: [Show ring index numbers](#)

Related Accessions:

Accession Number	Type	Derwent Update	Derwent Title
C1994-163836	C		
N1994-281412	N		
2 items found			

Title Terms: NOVEL DI SUBSTITUTE CHLORO PYRIDINE USEFUL STABILISED COMPONENT FERRO ELECTRIC NEMATIC LIQUID CRYSTAL MIXTURE SURFACE DISPLAY

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